

Amendments to the Claims:

This listing of claims will replace all prior versions in the application:

Claims 1-16 (cancelled)

17. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, ~~the nucleic acid encoding a polypeptide comprising~~ wherein the polypeptide transduces an increase in intracellular calcium and comprises greater than 85% amino acid identity to an the amino acid sequence of SEQ ID NO:16 or SEQ ID NO:18.

18. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide having at least ~~50~~ 200 contiguous amino acids of ~~an~~ the amino acid sequence of ~~SEQ ID NO:16 or~~ SEQ ID NO:18.

Claims 19-22 (cancelled)

23. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid ~~is amplified by primers that specifically hybridizes~~ under stringent hybridization conditions comprising 50% formamide, 5X SSC and 1% SDS at 42°C and wash conditions comprising 0.2XSSC and 0.1% SDS at 65°C to a nucleic acid having ~~the~~ a nucleotide sequence of ~~SEQ ID NO:15 or~~ SEQ ID NO:17.

Claims 24-48 (cancelled)

49. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide comprising ~~great~~ greater than 90% identity to ~~the~~ an amino acid sequence of ~~SEQ ID NO:16 or~~ SEQ ID NO:18.

50. (currently amended) The isolated nucleic acid of claim 17, wherein the nucleic acid encodes a polypeptide comprising ~~great~~ greater than 95% identity to the ~~an~~ amino acid sequence of ~~SEQ ID NO:16 or~~ SEQ ID NO:18.

51. (currently amended) An isolated nucleic acid encoding a G-protein coupled receptor polypeptide, wherein the polypeptide transduces an increase in intracellular calcium and comprises ~~comprising~~ at least ~~50~~ 200 contiguous amino acids of the ~~an~~ amino acid sequence of ~~SEQ ID NO:16 or~~ SEQ ID NO:18, ~~wherein the polypeptide has GPCR activity.~~

Claims 52-54 (cancelled)

55. (currently amended) The isolated nucleic acid of claim 51 wherein the nucleic acid comprises at least 600 contiguous nucleotides of ~~SEQ ID NO:15 or~~ SEQ ID NO:17.

56. (new) An isolated nucleic acid encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:18.

57. (new) An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:17.

58. (new) An expression vector comprising the nucleic acid of claim 17, claim 51, claim 56, or claim 57.

59. (new) A host cell transfected with the vector of claim 58.